and recommends a current review of the INC code reclamation procedure to address the current competitive status of the industry." The Commission seeks comment on "several proposals to clarify and strengthen these reclamation provisions." In addition, at paragraph 98 of the Notice the Commission requests comments on the definition of "in service" NXX codes.

Ameritech supports the NANC Report and believes that in order to deter and remedy hoarding, the NANPA must step up to its responsibilities and aggressively reclaim idle NXX codes and thousands-blocks[9] per industry guidelines. Ameritech supported the installation of a neutral third party Number Administrator as the code administrator. That process is now complete, and it is time to shift from transition efforts and to focus on the administrator carrying out the more difficult duties required of it in its contract, and detailed in the industry guidelines (i.e., reclamation, auditing, etc.). Before the industry or the Commission adopts any new or modified guidelines on reclamation, they must first ensure that the existing guidelines are rigorously enforced.

Ameritech believes that specific proposals to add new code reclamation guidelines or modify the existing ones can best be developed through the industry fora process. The industry itself is in the best position to continue to refine the guidelines to ensure NANPA has necessary and adequate direction and power to perform this role. The need for reclamation is relatively new, arising from the evolution of the competitive marketplace and the proliferation of competitive carriers. That is, five or ten years ago the demographics of the industry were much different, and there was little danger of, or reason for, number or code hoarding. The attributes of a competitive industry are still emerging and will likely continue to quickly evolve over time.

---

[8] For instance, some states continue to want to use pooling as a substitute for required NPA relief and thus avoid making politically uncomfortable decisions requiring overlays and mandatory 10-digit dialing. The result may very well be number exhaust before NPA relief can be implemented.

[9] Where thousands-block pooling has been inplemented.

However, it should be recognized that reclamation will occur in areas experiencing significant competition. In some cases, companies go out of business and/or are simply over optimistic in their number resource projections. These changing circumstances must be addressed as they arise, so there is no lag between the opportunity to reclaim idle codes, and the reality of reclamation. As circumstances change, the industry, through the open fora process and the NANPA, can most quickly react to rectify the situation if there is no need to modify fixed regulatory rules through a rulemaking proceeding.

In response to the Commission's requests for comments on the definition of an "in service" NXX code, Ameritech agrees this issue needs to be reviewed, and that the existing definition may need to be modified. However, Ameritech avers that the forum process (e.g., INC) is the appropriate venue to address this and other issues raised in this section of the Notice.

H. Cost Elements and Cost Recovery

At paragraphs 102 and 103 of the Notice, the Commission requests comment on the specific cost elements related to the proposed administrative measures; the costs versus the benefits of the proposed administrative measures; and on its tentative conclusion that the costs should be allocated and recovered "through the existing NANPA fund formula". At paragraph 104 of the Notice, the Commission tentatively concludes that "section 251(e)(2) requires that the costs of the administration solutions be borne by all telecommunications carriers on a competitively neutral basis", and that "including the costs of administration solutions in the NANPA fund will result in the allocation and recovery of those costs from all telecommunications carriers on a competitively neutral basis . . . ."

Ameritech supports the Commission's tentative conclusion that the recovery of any incremental costs, above the existing fixed price in the contract with the NANPA, including

implementing the proposed administrative measures, should be incorporated into the NBANC fund, which provides a competitively-neutral approach to cost recovery.

The existing NBANC fund formula was developed to allocate and recover the costs of "administering the NANP" on a competitively-neutral basis. Ameritech agrees that the proposed measures are integral to NANP administration and, thus, should be recovered via the existing formula. However, Ameritech cautions that unrestrained or inefficient development of these measures could significantly inflate costs and impair the cost/benefit balance supporting their adoption. For this reason, reasonable cost control must be exercised. For instance, measures should be developed and implemented to utilize existing technical, procedural and administrative practices of the industry.

V. OTHER NUMBERING OPTIMIZATION SOLUTIONS

A. Introduction

In the following sections, Ameritech will address the benefits, detriments and technical aspects of rate center consolidation, mandatory ten-digit dialing, "D"-digit expansion, and thousands-block pooling. It will also discuss the circumstances under which those measures may prove beneficial or detrimental to number conservation, and the associated costs impacts.

B. Non-LNP-Based Solutions

1. Rate Center Consolidation

At paragraphs 113-114 of the Notice, the Commission notes that rate center consolidation is the "combining or aggregating of several existing rate centers into fewer rate centers" and "serves as a numbering optimization measure by enabling carriers to use fewer NXX codes to provide service throughout a region . . . ." But the Commission notes that "[i]n areas where there are contiguous rate centers with identical calling areas and identical exchange

rates, rate center consolidation may be fairly painless to implement." Moreover, it further held that "[r]ate center consolidation will be most beneficial in areas where new entrants have NXX assignments, but service has not yet been activated."

The Commission further found that "rate center consolidation may, however, have disruptive impacts on carriers and customers." Potential adverse impacts on carriers noted by the Commission include revenue decreases, "expensive modifications to carriers' switches and operations support systems (OSS)", "disruption in the routing of E911 calls", and "a larger percent of revenue may be derived from basic local service and a smaller percentage from toll service." Equally as important, the Commission concludes that the potential adverse impacts of rate center consolidation on customers include local service rate increases, and "confusion and inconveniences when their local calling areas change". Moreover, the Commission notes in paragraph 115 of the Notice that "experiences of state utility commissions that have implemented rate center consolidation or have studied its potential impact demonstrate that this measure brings varying levels of conservation benefits and disruptive impact, depending on the effect on calling scopes and the complexity of the rate center geography." Ameritech agrees that rate center consolidation is a complex issue that can have severe adverse consequences depending on a host of local circumstances.

Yet, at paragraph 116 of the Notice, the Commission finds "rate center consolidation to be a vitally important long-term measure to optimize the utilization of numbering resources" and that it "should be implemented to the greatest extent possible . . . " However in paragraphs 117 and 118 of the Notice, the Commission concedes that "rate centers are inextricably linked with local call rating and routing issues, which fall within the traditional jurisdiction of state public

utility commissions" and seeks comment on how it "may further encourage states to implement rate center consolidation where beneficial impacts could be achieved."

Ameritech generally supports the conclusion that rate center consolidation can, under the right circumstances, be a valid number conservation measure. But Ameritech concurs that rate center consolidation is a local issue that must be addressed at the local level by the state commissions. Ameritech agrees with the Commission that rate center consolidation can, under certain circumstances, cause severe adverse impacts on customers and carriers alike.[10] It further concurs that the beneficial impact of rate center consolidation on number conservation can be minimal to non-existent in some areas depending on local circumstances. On balance, Ameritech strongly believes that rate center consolidation is and must be a local state issue that should only be pursued in areas where its benefits exceed its costs and adverse impacts, and rejected in other areas where its benefits do not outweigh its costs and adverse impacts.

The benefits of rate center consolidation are dependent on several local factors. For example, it is most effective when implemented in an area prior to the entry of a significant number of new entrants, and where a significant number of NXXs are still unassigned or have not yet been activated. Therefore, rate center consolidation would generally not be a viable option in areas with a large number of local providers already providing service. For example, in the Chicago LATA, over 200 carriers have been certified to provide service. In such an area, the positive effect of rate center consolidation on code utilization would be mitigated, since a significant number of codes have already been activated. Conversely, in areas with less competitive activity, where one would expect it to have a positive impact, rate center

[10] In its Whitepaper on Resolution No. 3, NARUC states "in many areas of the country the initiation of rate center consolidation will raise complex regulatory issues such as rate rebalancing which will take several years to resolve and will likely result in rate increases for consumers."

consolidation may not even be required to ensure adequate number availability for years to come.

The costs and detrimental impacts of rate center consolidation must be considered on a case-by-case basis. Rate center consolidation requires changes in the rate center boundaries used by carriers to rate calls. These boundary changes can have negative impacts on both carriers and customers. Carriers may incur significant cost to reflect the new rate centers in switch translations and billing systems. However, it is customers, not carriers, that will experience most of the pain. Rate center consolidation necessarily changes local calling areas, which will cause customer confusion – what was once a local call could now be toll and vice versa. Customers would most likely also need to reprogram PBXs to reflect the new rate centers, and mileage charges for private line purchasers could be altered in some case. Also, customer contracts for optional calling plans and even the plans themselves would require review if tied in any way to usage commitments. Obviously, all of these factors are local in nature, and need to be considered by the state commissions before rate center consolidation is undertaken in a particular area.

The Commission asks at paragraph 118 of the Notice if it should do more to provide incentives to states and carriers to consolidate rate centers in order to reduce the number of situations where new entrants are required to be assigned full NXX codes. Since rate center consolidation is a local issue that can cause severe costs and other adverse customer impacts, and can produce minimal conservation benefits, Ameritech does not believe the Commission should interfere in the local determination of whether or not rate center consolidation is, on balance, beneficial in a particular area. As the Commission has already discussed, that determination depends on a host of local circumstances and impacts that will vary from area-to-area.

Ameritech submits that these facts and impacts must be developed through a detailed, unbiased local analysis. State commissions are well aware of the alternatives available to them to ensure number availability and are in the best position to determine what will work best in each unique local situation. For example, number pooling and geographic portability may be better long-term solutions than rate center consolidation in many areas. Therefore, the Commission should not seek to introduce an artificial bias in favor of rate center consolidation but should let the states determine whether and how rate center consolidation should be implemented depending on local circumstances.

Finally, the Commission seeks comment on whether rate center consolidation will result in higher rates being charged for basic service. Ameritech believes that alteration of existing rate center boundaries will not be revenue neutral.[11] As local calling areas are expanded and toll revenues shrink, basic service rates would have to increase to cover the shortfall. [12] Increased competition in the intraLATA toll marketplace will not diminish this effect as the Commission suggests. Regardless of the level of competitive activity, significant revenues will be shifted to, and need to be recovered from local residential service rates that are for most part below cost.

2. Mandatory Ten-Digit Dialing and Related Measures

Mandatory ten-digit dialing requires that customers dial ten-digits (NPA NXX-XXXX) for all calls, including those within the NPA from which the call originates, including local or toll calls. Ten-digit dialing acts as a number optimization/conservation measure because it frees up "protected" NXX codes within an adjacent NPA. The potential use of "0" or "1" in the so-called D-digit (fourth digit in the 10-digit telephone number) for freeing up additional codes

[11] There are a few cases where adjoining rate centers have identical calling privileges, and where combining into one rate center would be revenue neutral.

[12] Analog private lines are normally rated based upon a rate center concept, while digital private lines are rated from servicing wire center-to-servicing wire center.

within NPAs is currently under review within INC. But, as will be discussed, there are significant technical and billing issues that must be resolved in order to realize those benefits.[13]

The Commission correctly notes at paragraph 122 of the Notice that "there is often significant customer resistance to ten-digit dialing, which may explain why some state commissions have chosen to implement NPA splits rather than more efficient and customer friendly NPA overlays (ten-digit dialing is required for an overlay). For this reason, the Commission finds at paragraph 124 of the Notice that "[t]en-digit dialing would allow future area code relief projects, particularly overlays, to be less disruptive to consumers." It also finds that "if ten-digit dialing were adopted as part of a national optimization policy, customer confusion resulting from inconsistencies in dialing patterns from one area to another would be eliminated."

Today, the Commission requires mandatory ten-digit dialing as a condition for the adoption of an NPA-overlay. This requirement is not based upon technical or cost limitations, but rather upon perceived competitive concerns. The unfortunate effect of this ruling is that there has been significant opposition to NPA overlays, which has made it very difficult for states to adopt NPA overlays, even when they are the optimal form of relief. For this reason, Ameritech supports elimination of ten-digit dialing as a roadblock to NPA overlays.

Basically, the Commission responded to concerns that CLECs may end up with most of the NXX codes in new NPAs, while the incumbent LECs would have most of the NXX codes in the old NPA. As a result, with seven-digit dialing within each NPA, the incumbent LECs would allegedly gain an advantage because all existing customers would retain their numbers in the

[13] Some members of INC have suggested that the cost of freeing up NXX codes that begin with "0" or "1" in the D-digit may actually exceed those of expanding the current 10-digit dialing plan.

existing NPA, (and, thus, be able to call each other by dialing only 7- digits) while the new NPA would only be gradually filled.

The Commission should reconsider its requirement that NPA overlays must include mandatory ten-digit dialing because of its adverse impact on NPA relief on customer service, and because its alleged competitive impacts were overstated and have been mitigated by later developments. As the Commission finds in the Notice, mandatory ten-digit dialing creates customer dislocations and significant political opposition that has been wrongly transferred to NPA overlays. Moreover, many of the competitive concerns relating to overlays without mandatory ten-digit dialing were overstated, did not materialize, or have been or will be mitigated by long-term number portability ("LNP") and thousands-block pooling. The fact of the matter is that many CLECs have obtained significant NXX code assignments in existing NPAs, and that thousands-block pooling can increase the availability of numbers in NXX codes in existing NPAs even further. Moreover, incumbent LECs are also requesting assignment of significant numbers of new NXX codes in new NPAs, a trend that would increase under thousands-block pooling. Equally as important, since the introduction of LNP, existing customers of incumbent LECs can transfer their service to a CLEC, and retain their existing number and seven-digit dialing capabilities.

At paragraph 126 of the Notice, the Commission asks if it "should adopt nationwide ten-digit dialing, or whether [it] should encourage states to implement ten-digit dialing as a priority." As shown above, the Commission should eliminate its existing mandatory ten-digit dialing condition for NPA overlays. If the Commission eliminates this requirement, then it should not adopt nationwide mandatory ten-digit dialing, or encourage the states to do so. However, if the Commission does not reconsider its rule, Ameritech strongly suggests that ten-digit dialing be

mandated at the national level on a date certain. Mandatory ten-digit dialing will eliminate this resistance to NPA overlays, and will facilitate their adoption in areas where they provide the optimal form of NPA relief. The wide spread use of overlays as the preferred NPA relief measure would put an end to the millions of number changes (NPA) that are required every year as the result of NPA splits.[14] The general public has been very clear in communicating their frustration with continual NPA splits and, thus, telephone number changes.

However, mandatory ten-digit dialing would have the collateral benefit of permitting LECs to reclaim protected NXX codes across the nation and make them available for assignment.[15] In addition, this step could have the added benefit of providing for a uniform dialing pattern nationwide and, thereby, end a significant source of confusion and frustration for the traveling public.

At paragraph 127 of the Notice, the Commission asks if the so-called "D" digit expansion should be mandated at the national level, or if it "may be implemented on a statewide or NPA-wide basis . . . ." In this regard, the Commission notes that the NANC Report "states that D digit expansion must be done simultaneously by all participants in the NANP because otherwise calls can not be completed to exchanges where carriers continue to retain the D digit for internal use." The Commission at paragraph 128 of the Notice also finds that "D digit expansion, however, raises significant and costly implementation concerns." Included is "significant and costly technical modifications to switches, operations support systems, and customer premises equipment"; the development of alternate technical solution for "intra-network use"; and

[14] NPA splits actually reduce the geographic areas served by each individual NPA, by dividing the area of the existing code between 2 or more NPAs. At some point, areas served by each NPA become too small to be practical, and the narrow area served by each NPAs means that additional NPA may be required in pockets of demand even though other areas still have significant codes available. However, in areas that have not yet experienced an NPA jeopardy split, an NPA split may still be the optional relief measure.

[15] Protected codes are ones that are available for assignment in one NPA in order to permit seven-digit dialing to the same code in an adjacent NPA.

potential disruption of network call completions "if not implemented by all service providers in a timely manner."

Because of the severe adverse impacts and costly network and OSS modification involved, Ameritech believes the current analysis being done on D-digit expansion at INC (which includes both a technical review, and a potential cost/benefit analysis) should continue. However, Ameritech does not believe there is a 'quick fix' to expanding the 'D' digit and that it is premature to adopt a policy supporting that measure at this time.

C. LNP-Based Solutions: Number Pooling

Beginning at paragraph 138 of the Notice, the Commission concludes that "implementing thousands-block pooling in major markets is an important numbering resource optimization strategy that is essential to extending the life of the NANP. Ameritech has already expressed in detail its views on the feasibility and costs of thousands – block pooling in its Comments on the Bureau's proceeding on the NANC Report. Ameritech will not repeat its earlier comments here, but rather incorporates it by reference.[16]

As a consequence of the Commission's tentative adoption of thousands-block pooling, it seeks comment on how thousands-block pooling can be "implemented". Ameritech's Comments will focus on these implementation issues. The Commission first concludes that "carriers should be required to participate in pooling in areas where the benefits of pooling outweigh the associated costs", and seeks comments on how to best achieve that goal. At paragraph 144 of the Notice, the Commission tentatively concludes that "any deployment schedule for thousands-block pooling should initially be tied to the largest 100 MSAs." Ameritech agrees. As was the case with LNP, Ameritech believes that initially limiting pooling to competitive areas within the

[16] North American Numbering Council Report Concerning Telephone Number Pooling and Other Optimization Measures, NSD File No. L-98-134, (NANC Report Proceeding") Comments of Ameritech pp.10-12.

top 100 MSAs makes sense. Those competitive areas are where conservation is needed most, since they have the highest demand for additional codes and numbers and, incidentally, the highest deployment of LRN/LNP. Thus, the Commission can require deployment of pooling in areas that are making the greatest demand on numbering resources, while at the same time not requiring the industry to deploy LRN/LNP technology solely for pooling.

However, deployment of pooling within all areas in the 100 largest MSAs where LRN/LNP has been deployed should not be a foregone conclusion. Rather, the Commission should develop an analysis criteria that makes an NPA-by-NPA analysis to determine where pooling should be pursued. This criteria should include consideration of the number of NPA splits or overlays an area has already undergone, the amount of overlapping local calling areas between rate centers, the total number of rate centers within the area under review, the number of competing carriers, and the prevalence of LRN/LNP-equipped offices.

As detailed in the NANC's NRO Report, pooling has the highest potential for number conservation in those NPAs containing a large number of competing carriers and those where there is already significant deployment of LNP. This makes sense because pooling is a number sharing methodology that relies on the existing LRN/LNP architecture. If there is not a large number of competing carriers that are capable of sharing numbers, then there is little value in pooling.

Similarly, the potential benefits of pooling are enhanced if the area served contains a large number of rate centers. An examination of the root cause of recent NPA exhausts reveals that the primary driver is a large influx of new competing carriers within an area, each of which requests, and is entitled to, a separate NXX code for each rate center it serves.

At paragraph 145, the Commission asks "whether ordering LNP capability primarily for purposes of thousands-block pooling is permitted under the 1996 Act." Ameritech believes that there is severe doubt about the Commission authority under the 1996 Act to order carriers to deploy any specific technology or to provide any particular service, except, as is the case with LNP, where it has been specifically granted that authority. Under section 251(e)(1) the Commission is granted jurisdiction to "create or designate one or more impartial entities to administer telecommunications numbering" and to make numbers available on an "equitable basis". The Commission further is granted the "exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States." However, unlike LNP, there is no specific grant of power to require carriers to deploy the LRN/LNP technology solely for numbering purposes.

Because of the uncertainty regarding the Commission's authority to order deployment of the LRN/LNP technology for the sole purpose of number pooling, the Commission should limit number pooling to areas where LRN/LNP has already been deployed. As previously discussed, those areas are the prime candidates for number pooling anyway (based upon the suggested criteria detailed above) since they include the areas where local exchange competition is emerging and the resulting additional demand for numbering resources has occurred. Moreover, under the Commission's LNP rules, this approach is self-correcting on an on-going basis, since when CLECs enter a new area, they have the ability to make a bona fide request for LNP and, thus, the LRN/LNP technology will also automatically become available to also support pooling. Under this approach, the additional burden of equipping all offices with the LRN/LNP capability is minimized since pooling is only implemented where LNP has already been deployed.

Ameritech's experience shows that the administration of numbers at the thousands-block level (as opposed to the NXX level) is extremely burdensome. Therefore, Ameritech believes that all carriers that use numbers from the same dwindling resource should "share the pain" in conserving that resource. Any exceptions will severely impair the effectiveness of pooling. As such, Ameritech proposes that all carriers must be obligated to participate in pooling, when and where they have LNP and as soon as technically feasible.

Regarding technical feasibility, it should be noted that the Illinois Commerce Commission ("ICC") recently granted Ameritech an exemption from pooling in its 1A ESS switches in the Chicago area.[17] This was due to significant technical limitations within this switching platform, which is manufacturer-discontinued and is no longer supported for new development. Ameritech believes that such exclusions are fitting and proper where there is evidence of significant technical constraint, and that such exemptions should be authorized by the Commission.

At paragraph 151 of the Notice, the Commission asks parties to address combining rate center consolidation with pooling. Ameritech believes that rate center consolidation and pooling are competing number conservation measures, not complimentary. As noted above, the benefits of pooling are maximized if there are a large number of competing carriers requesting numbering resources in a large number of rate centers. If the total quantity of rate centers within a given area is reduced, then the potential benefits of pooling (due to the assignment of thousands blocks instead of full NXXs) are likewise significantly reduced. Put simply, if carriers only need a handful of NXXs codes to serve a large geographic region, then there is less value in requiring them to share the numbers within those few NXXs codes. Thus, often pooling is generally only

[17] ICC Docket 98-0497, Interim Order at p. 15.

worth its cost in NPAs where rate center consolidation is not feasible or practical due to local circumstances or rate plans.

At paragraph 152, the Commission asks whether a state could decide to opt out of pooling "based on detailed studies of the effectiveness pooling would bring to a particular NPA or NPAs." In response to this question, Ameritech believes that a detailed study should be the basis of deployment of pooling in any NPA, and that pooling should not be deployed where it does not provide a sufficient benefit to justify its costs. Regarding the nature of that study, Ameritech directs the Commission's attention to Section 5.10.2 of the NANC Report on Number Optimization, "Conditions Which Support Maximum Potential" (for pooling). If the NPA does not have a large number of competing carriers with which to share numbers (and are LNP-capable), or there is an insufficient number of spare or lightly contaminated blocks which could be shared (or an insufficient number of spare NXXs from which new blocks could be pooled), then pooling should not be pursued. In addition, this section of the NANC report emphasizes the fact that pooling is not an NPA relief measure. This point is supported by experience gained from the Illinois Pooling Trial. As compelling as the results of the Illinois Trial have been, the life of NPA 847 was extended only slightly more than a year, and will still completely exhaust sometime later in 1999.[18]

In paragraph 154 of the Notice, the Commission seeks comment "on the relevant areas for opting into, or out of, nationwide thousands-block pooling methodology." As far as the scope of pooling within a given area, since the intent is to conserve numbering resources within an NPA, pooling only should be implemented on an NPA-wide basis, in NPAs where LRN/LNP

[18] At the start of the Illinois Thousands-Block Pooling Trial, NPA 847 was projected for exhaust in the fourth quarter of 1998. The latest projection is that it will exhaust one year later in the fourth quarter of 1999. The extension of one year in the life of NPA 847may not be entirely attributable to pooling since during this same period, a significant number of previously assigned NXX codes were reclaimed.

has been deployed and where, based upon a detailed study, the NPA meets the criteria for deployment of pooling discussed above. No carrier should be able to opt out of pooling in an NPA that meets the above criteria, unless significant technical constraints exist. Moreover, where an NPA meets the test, the entire NPA should participate in pooling. It simply makes no sense to deploy pooling on a rate-center-by-rate-center basis.

At paragraph 158 of the Notice, the Commission asks parties to comment on whether the NANC Report's estimate that "thousands-block pooling could be implemented, within 10 to 19 months from a regulatory order" is adequate. The Commission also asks "whether the estimated time allocated to each of the major tasks involved in implementing thousands block number pooling is necessary or, on the otherhand, is sufficient to ensure the proper implementation of thousands-block number pooling." Ameritech agrees that the NANC Report does an adequate job of identifying all of the activities needed to implement pooling on a national basis. But it should be noted that the time periods specified in the NANC Report were only estimates, and that many of the tasks listed are already well underway or have been completed by the industry. Of the work remaining, perhaps the most critical is the development and implementation of new NPAC software to support pooling. Several carriers have stated that the Efficient Data Representation (EDR) capability planned for this upcoming software release (Release 3.0) is essential to their participation in pooling in multiple NPAs. Current estimates indicate that this software will not be available until a year or more after the Statement of Work (SOW) is agreed to by all of the regional Limited Liability Corporations (LLCs). Past experience suggests that additional time will be required to allow interconnecting carriers to modify their interfaces (e.g., SOA and LSMS) to remain compatible with the NPAC enhancements, and for individual carrier testing. Ameritech estimates that the deployment of thousands – block pooling, based upon a set

of national guidelines and standards, may still require a year and a half of development and testing. This time can be put to good use by individual carriers in completing the necessary enhancements to their own support systems (OSS) and network components (e.g., switches, SCPs, etc.,) prior to the actual start date.

On a related issue, consideration should be given to staggering the deployment of pooling. It should be acknowledged that significant preparatory activity is required prior to the actual turn-up of pooling in a given NPA[19] that can only begin after an implementation date is established for the NPA. A number of carriers may be overwhelmed by this work if pooling is implemented in several different NPAs at the same time. Ameritech recommends that a minimum three month interval be maintained between deployment of pooling in NPAs in each NPAC region. Additionally, on a national scale, no more than three NPAs should be scheduled for pooling implementation within the same month. If the states are allowed to decide when and where to deploy pooling (based upon criteria set by the Commission), they should be obligated to submit their proposed deployment schedule to the Commission for its coordination and approval.

Ameritech questions the practicality of the Colorado Rural LEC Proposal for NXX sharing absent LRN/LNP. The NANC's NRO-WG studied such non-LNP based sharing alternatives last year and subsequently decided that they did not merit further pursuit.[20] The routing of calls to certain numbers within an NPA/NXX to another (LNP-capable) switch is extremely inefficient and may result in nightmarish end user and access billing problems. Similar inefficiencies and problems can be expected with other non-LNP methodologies such as DID and route indexing.

[19] See, Sub-section 8.1, INC Thousands-Block Pooling Administrative Guidelines.
[20] See, Section 8 and 9, NANC Report.

At paragraph 178 of the Notice, the Commission asks whether it should adopt "the TS1S1.6 proposed technical requirements for thousands-block pooling as a national standard or, in the alternative, whether [it] should direct the NANC to recommend technical standards for thousands-block pooling once such standards have been adopted by the American National Standards Institute(ANSI)," The current balloting process has served the industry well for several years, and Ameritech sees no need for Commission intervention, or for a second step at NANC before these standards are implemented. Indeed, formal adoption of such requirements may prove detrimental, since it could delay implementation of the standards and any changes or augmentation subsequently deemed necessary may be hampered by the need to seek formal regulatory approval.

Beginning at paragraph 187 of the Notice, the Commission asks parties to comment on the NANC and INC proposal that carriers only donate to the pool "uncontaminated" and "lightly contaminated" thousands blocks of numbers (up to 10% of the numbers assigned). Ameritech strongly endorses this proposal.

The Commission also asks parties to address proposals by MCI WorldCom, Ad Hoc, Cox and MediaOne. These parties claim that since most incumbent LEC blocks of numbers are contaminated, they will gain a competitive advantage if they are allowed to retain them. MediaOne, therefore, proposes that only incumbent ILECs be required to donate blocks that are 25% contaminated. Ameritech is dismayed that these parties seek to impose special burdens on incumbent LECs, while they would continue to only donate clean and lightly contaminated blocks under the guise of competitive balance. The INC guidelines on block donations were based upon a very sound pooling principle "keep what you need and share the rest". What some parties are now suggesting, flies in the face of this concept by imposing a special burden on one

particular industry segment and, thus, penalizing those carriers that have more efficiently utilized the blocks of numbers assigned to them.

The MediaOne proposal is not a sound policy choice, not only because it penalizes the incumbent LECs which have achieved the highest line utilization rates, but because it would obligate those carriers to engage in the burdensome and unnecessary process of porting huge volumes of working numbers back to themselves in order to prepare the contaminated blocks for donation. The ICC specifically rejected the proposal of raising contamination levels in its December 16, 1998 Order in its Proceeding 98-0497.[21] In addition, since many of these same (efficient) carriers have high demands for numbering resources in the areas they serve, many such blocks would soon be reassigned back to them by the Pool Administrator, thus, rendering all their previous porting efforts wasted.

Moreover, all carriers that participated in the Illinois Thousands-Block Pooling Trial expressed a preference for the assignment of clean blocks.[22] This was to be expected, since there is less utility to the recipient carrier of blocks which have a significant amount of unassignable numbers. Any requirement for donation of blocks with contamination levels of higher than 10% will not only increase the amount of work effort required for both the donor and recipient carrier, but also result in a higher demand for blocks from the pool. This is so, because carriers that receive a highly contaminated block will have far less than 1,000 numbers available to assign.

To summarize, there is absolutely no competitive imbalance in requiring all carriers to donate clean and lightly contaminated blocks which they are not using. In fact, a competitive imbalance would be created if the MediaOne proposal is accepted. The fact that some carriers

[21] In part, the ICC found "raising the level of contamination would increase technical and administrative burdens on carriers. The record indicates that the identification of blocks that would be eligible for number pooling and the porting of assigned numbers back to itself requires the work and coordination of several departments.
[22] See, 847 NPA Number, Illinois Pooling Assignment Guidelines at 7.1.

may be obligated to donate a higher quantity of blocks than others is simply due to their lower utilization levels – the very situation that pooling is attempting to rectify in the first place!

At paragraph 190, the Commission asks whether it should order some form of sequential number assignment prior to the actual implementation of pooling. Ameritech opposes sequential assignment, but does support the concept of administrating numbers in groups of one thousand in those NPAs where pooling is being considered. That is to say, within an NXX, the assignment of telephone numbers should be limited to specific thousands-blocks until some level of utilization is achieved (e.g.: 80%). Additional thousands-block can be opened for assignment when that threshold is achieved in the previously opened blocks. This makes sense, is manageable, and will help ensure that the maximum quantity of blocks are available for donation once pooling is implemented. Ameritech reiterates, however, that any requirement for assigning numbers in, or opening thousands-blocks in, strict numerical order (i.e.: 0-9) serves no valid purpose.

Regarding transitioning to Individual Telephone Number Pooling (ITN), Ameritech detailed its opposition to this proposal in its Comments in the NANC Report Proceeding.[23] Ameritech will not repeat its discussion here, except to say that little more can be added to the record of the difficulties, costs and marginal benefits of ITN over thousands-block pooling. With the exception of only a handful of parties, commenters across all industry segments told the same story - the costs and resources needed for ITN will be huge, and the potential number optimization benefits extremely suspect. If, however, the Commission feels compelled to require the industry to further improve number conservation (over 1K pooling), Ameritech suggests that the Commission focus its attention on location portability, which will require a similar amount of time and resources (as ITN), yet will result in tangible benefit to all consumers. Ameritech

believes that if the average consumer was asked what number portability means, he or she would reply that it allows them to keep their telephone number when they move. Alas, this is not the case. Implementation of location portability would achieve conservation by allowing numbers within the same NXX code to be assigned within any rate center serving a large geographic region (e.g., NPA, MSA, state, etc.,). It would forever decouple the association of an NPA/NXX with a particular rate center, thus, achieving the same benefits as rate center consolidation without the need, in some areas, for massive tariff restructuring. Ameritech does not dismiss the significant implementation issues associated with the deployment of location portability, but simply feels that the industry's (and the Commission's) efforts and resources would be better spent on a project that has true benefit for customers.

Similarly, little more can be said about the pitfalls of Unassigned Number Porting (UNP). As now admitted by one of its strongest proponents, UNP is simply not a conservation measure and may, in fact, result in further numbering inefficiencies.[24] This is due to the fact that with UNP, individual carriers lose control over the spare numbers remaining in their inventories, and may be incented to obtain additional numbering resources to prevent a sudden shortfall. In addition, UNP would allow carriers with ample supplies of numbers to raid other carrier inventories in order to obtain certain desirable numbers. Ameritech is not opposed to the porting of unassigned numbers between two carriers under mutual agreement, but questions the need for national guidelines and procedures to do so. Ameritech cautions the Commission to be skeptical of the latest argument of some supporters of UNP - that it is required to provide competing carriers with equal access to numbering resources. Access to numbering resources already assigned to a particular carrier was never the intent of Section 251 of the 1996 Act, and is a

[23] *Id.*

buyer's interpretation of the requirements. Indeed, even incumbent LECs have never had access to numbers within the inventories of other carriers, nor could they assign numbers within their own inventories that were within NXXs assigned to other switches or rate centers. This was never considered a detriment to providing service, and to now suggest that it is, simply acts as a smokescreen to some parties' true intentions - gaining access to perceived marketable numbers presently allocated to other carriers.

In addition, the results of the Illinois Thousands-Block Pooling Trial made one fact abundantly clear -- when operating in a pooling environment which requires management of numbering resources at much smaller levels (i.e., in blocks of 1,000 instead of 10,000), any and all preferred numbers disappear at a rapid pace, and within a year there are few if any, available numbers remaining that are in sequence with those assigned to an existing customer or even within the same NPA/NXX. This is a logical outcome of pooling or any other conservation method intended to increase utilization.

D. Pooling Implementation Issues

1. Technical Issues

Ameritech has no further input on this issue beyond what it has previously presented in these Comments.

2. Administration

At paragraph 182 of the Notice, the Commission finds that "[a]ny nationwide implementation of thousands-block pooling will require detailed guidelines governing its administration." The Commission points out that in other areas, INC, T1S1, and other industry

[24] See, sub-paragraph 4, AT&T Contribution LNPA-227 on INC Issue #177, where it is conceded "[t]his use of UNP [to meet customer requests for a specific number] does not give an obvious number conservation benefit.

groups "have drafted guidelines and technical specifications that describe, in detail, the procedures to be followed both by the administrators and those carriers requesting NANP resources . . . ." The Commission states that "we anticipate that a similar type of arrangement will exist in relation to administration of thousands-block pooling." Ameritech agrees. As the Commission notes, "the INC has already drafted guidelines relating to the functioning of the Pooling Administrator and entities requesting numbering resources from the Pooling Administrator." Ameritech agrees and strongly endorses the adoption of the INC guidelines, since they were developed through an industry consensus process and, based upon Ameritech experience in the Illinois Thousands-Block Pooling Trial, are very adequate for the task.

At paragraph 184 of the Notice, the Commission seeks comments on "whether the NANPA should serve as thousands-block Pooling Administrator, or whether the Commission should seek competitive bids . . . ." Ameritech believes that the NANPA should also serve as pooling administrator. There is no compelling reason to fragment number administrative responsibilities. In fact, the NANPA has significant expertise in number assignment issues and would seem to be the strongest candidate to also assign thousands-blocks, as well as NXXs. Moreover, such an arrangement would eliminate duplication of effort and potential lack of coordination between two separate entities involved in assigning NXX codes and blocks.

Ameritech addresses donation of contaminated blocks and sequential number assignment elsewhere in these Comments. However, at paragraph 192 of the Notice, the Commission notes that the Thousands Block Pooling Guidelines "propose a nine-month inventory of numbers in both the industry inventory and service provider inventory." Ameritech believes that a nine-month inventory of numbers strikes the proper balance between having a sufficient inventory of numbers to efficiently operate and waste of numbering resources. These levels were established

by the industry, after long debate, through a consensus process, and there is no need to re-debate the issue here. Moreover, if based upon real world experience after pooling is implemented, it appears that a nine-month inventory is either inadequate or excessive, the guideline can be promptly adjusted, as appropriate by the same industry group that created it.

3. Cost Recovery

At paragraph 193 of the Notice, the Commission concludes that "thousands block pooling is a numbering function" and that, therefore, "section 251(e)(2) authorizes the Commission to provide the distribution and recovery mechanism for both intrastate and interstate costs of numbering pooling." In paragraph 194 of the Notice, the Commission finds that "an exclusively federal recovery mechanism for number pooling will enable the Commission to satisfy most directly its competitively neutral mandate, and will minimize the administrative and enforcement difficulties that might arise were jurisdiction divided." Therefore, the Commission tentatively concludes that pooling costs will "not be subject to 'jurisdictional separations." Ameritech agrees.

The Commission at paragraphs 195 through 210 of the Notice, addresses a number of issues associated with the allocation and recovery of costs related to thousands-block pooling implementation. Basically, the Commission models its proposed recovery mechanism on the scheme it adopted to provide for competitively neutral recovery of long term number portability ("LNP") costs. Under this proposal, the costs would be assigned exclusively to the federal jurisdiction; allocation and recovery of these costs would be subject to the LNP competitive neutrality requirements; and costs would be assigned to the three LNP categories. However, the Commission tentatively concludes at paragraph 204 of the Notice, that LECs may not recover their pooling costs via an end user surcharge. With regard to price cap treatment, the

Commission requests comment at paragraph 205 of the Notice as to whether the costs should be treated as exogenous and whether they should be placed in a new basket. Other threshold issues include: 1) whether as an alternative to end-user revenues, pooling costs should be recovered via "per-number charges" (apparently paid by carriers receiving blocks); 2) whether pooling costs should only be allocated to carriers receiving thousands-blocks. In addition to the discussion of pooling costs and their recovery, the Commission at paragraph 198 of the Notice requests input on "detailed estimates of the costs of thousands-block pooling" and on the implementation costs of the Illinois pooling initiative.

Ameritech supports the Commission's tentative conclusions that pooling is a numbering administration function subject to the Commission's authority under section 251 (e)(2). Ameritech also generally supports the Commission's tentative conclusion that it will adopt the general cost recovery framework for pooling that was used for LNP. The terms of LNP cost recovery are now well understood allowing for a straightforward discussion of the key issues. Ameritech further concurs with the Commission's tentative conclusion to use the LNP two-part test for competitive neutrality, and to use the same three cost categories (industry shared, carrier specific directly related to pooling, and carrier specific not related to pooling). In addition, Ameritech agrees with the Commission's tentative conclusion that only the first two categories of costs fall under the authority of section 251 (e) (2) and that once allocated to a carrier, that carrier's portion of the shared industry costs become carrier specific.

However, Ameritech opposes the allocation or recovery of pooling implementation costs through a per-number charge and, especially, one where costs are allocated based upon existing numbers used. Such an approach does not meet the Commission's competitive-neutrality test because it penalizes carriers that use technologies or provide services that require large quantities

of numbers. In addition, Ameritech also strongly disagrees with the Commission's tentative conclusion that "LECs subject to rate-of-return or price-cap regulation may not recover their interstate carrier-specific cost directly related to thousands-block pooling implementation through a federal charge assessed on end-users." The Commission has no basis for a conclusion that pooling costs are any different than LNP costs, or that an end user charge is not a proper competitively-neutral vehicle for recovering those costs. Any other mechanism will raise severe competitive-neutrality issues under the Commission's own criteria, and may be confiscatory. Although surcharges may not be politically popular, the Commission must fulfill its legislative mandate and adopt a truly competitively-neutral form of cost recovery. The industry costs of implementing pooling will be significant and absent Commission action to provide some form of effective cost recovery mechanism for incumbent LECs, they will be significantly disadvantaged in their to ability compete and earn a fair return on their pooling investment.

As was the case with LNP, it is highly unlikely that the Commission has a sufficient record from this initial proceeding on the issue of cost recovery for pooling from which to make an informed decision or that the issue will be ripe for decision. For these reasons, Ameritech recommends that that cost recovery be the subject of a separate further notice dedicated to cost recovery.

E. Carrier Choice for Numbering Optimization Strategy

Beginning at paragraph 215 of the Notice, the Commission requests comment on whether it should, as an alternative to any form of regulatory mandate on specific optimization measures, simply require carriers to meet a utilization threshold level. In this manner, carriers could choose the form of optimization best suited to their situation. This approach was seen as having the benefit of less regulatory intrusion.

Ameritech opposes this approach to number optimization because it is discriminatory and inefficient. Ameritech's opposition is based on the concerns the Commission itself raised in the Notice.

1. There is no way to select a methodology that would be competitively neutral to all participants, because each industry segment's number utilization needs are different and thus what may be an excessively liberal utilization level for one segment, may be impossibly stringent for another.

2. As the Commission recognizes, this approach to be equitable would require the consideration of such factors as class of carrier, geography (e.g., NPA, state, etc.), local market conditions. If such factors could be adequately addressed, the resulting implementation and associated administration would be overly complex, and still not adequately reflect all possible circumstances of each industry segment in a changing telecommunications marketplace.

3. Leaving the decision to carriers would negatively impact the effectiveness of other optimization methods. For example, pooling cannot occur without donor blocks and someone to receive them. Also, it is not clear how one or two carriers electing to pool could effectively establish and support the necessary pooling administration and infrastructure.

In summary, what might appear a simple approach to a complex problem, is just too good to be true. The fact is that no utilization criteria can be developed that will be simple enough to be reasonably administered, while not resulting in some carriers having to meet impossible utilization levels, while others have such liberal requirements that they can waste numbering resources.

VI. PRICING OPTIONS

Beginning at paragraph 225 of the Notice, the Commission requests comment on an alternative approach for "improving the allocation and utilization of numbering resources" in which carriers "pay for the numbering resources they request or receive." The Commission specifically seeks comment on its legal authority under section 251(e) (2) to institute a pricing mechanism for numbers, whether there are any public policy reasons for not establishing such

pricing mechanisms, and possible approaches to such pricing. The Commission reaches no tentative conclusions regarding this alternative, and fully admits that consideration of pricing mechanisms would be a "long-term alternative".

However, it appears the Commission is giving consideration to the notion and has concluded that the current "zero price" for numbers has had a negative effect on carrier behavior with regard to conservation. Ameritech opposes the "pricing" alternative because it exceeds the Commission's statutory authority, is discriminatory, is not competitively-neutral, and would create a barrier to entry. The proposal is also flawed from a policy perspective because it would impact carriers differently depending on their need for numbers. The effect would clearly not be competitively -- neutral and could pose a significant barrier to entry for some new entrants that have a need for a significant supply of new numbers to get started.

Ameritech questions the rationale that absent "prices for numbers" carriers are not incented to use numbers efficiently. It should be clear now, if not in the past, to all carriers that inefficient use of numbers will cause severe long-term service and financial consequences for the entire industry and cannot be tolerated. These consequences, plus audits and other effective enforcement mechanisms, will provide the most effective incentive for number conservation. Moreover, a level of pricing for numbers that would have a sufficient impact on large carriers to create a real incentive for number conservation, could be financially burdensome for smaller and new carriers. The other effect of charging for numbers at a significant enough level to encourage conservation will be to increase the price of service to consumers. The proposal could also be counterproductive to number conservation since carriers that purchased numbers would feel that they rightfully own them and need not be concerned about number conservation.

VII. CONCLUSION

Ameritech strongly supports the Commission's number optimization and conservation goals. However, at the same time it should be recognized that even the most successful optimization and conservation measure will not create new numbers and codes and, thus, does not eliminate the need for NPA and, eventually, NANP relief measures. It further agrees that any optimization or conservation measure must be analyzed pursuant to a balancing test that weighs its conservation benefits against its costs and adverse impacts. Ameritech believes that optimization is only possible if the Commission adopts one national numbering policy that is strictly adhered to in all states, without exception. But, the national numbering policy should leave sufficient flexibility, so the industry and the states can quickly respond to changing technical and market conditions and local circumstances. Ameritech proposes that this can best be accomplished if the national numbering plan is implemented by the industry through guidelines adopted through the consensus process, accepted by reference in the Commission's rules, and enforced by the NANPA.

Ameritech has the following specific proposals regarding the issues raised by the Commission in the Notice.

19. Initial NXX code assignments should be made based upon proof that the carrier is certified to provide service in the area.

20. Growth code assignments should be made based upon verified need.

21. The Commission should adopt INC's definitions developed through the Central Office Code Assignment Workshop, and the NANC NRO-WG number reservation definitions. These definitions should be codified by reference in the Commissions rules, and administered by the NANPA.

22. Data reported for forecasting purposes should be limited to the data actually needed to perform that function; must be reported by all numbering users; and should be reported at the NPA/NNX level.

23. Forecasting and utilization data should be reported to the NANPA; utilization data should only be reported at an aggregate level; and all carrier-specific data should be protected, as confidential.

24. The NANPA should have the power and responsibility to conduct audits, where warranted, in accordance with guidelines developed by the industry, and adopted by reference in the Commission's rules.

25. Industry numbering guidelines must be rigorously enforced by the NANPA.

26. Idle NXX codes and blocks must be aggressively reclaimed by the NANPA pursuant to industry guidelines.

27. Rate center consolidation should remain a local state issue.

28. Mandatory ten-digit dialing should be eliminated as a roadblock to NPA overlays or, if the Commission rejects that proposal, should be imposed nationally on a date-certain.

29. D-digit expansion should be studied further, but should not be imposed at this time.

30. Thousands-block pooling should only be implemented based upon a NPA-by-NPA analysis, using specific criteria developed by the Commission.

31. Thousands-block pooling should only be implemented where LRN/LNP technology has been deployed and where, on balance, the benefits of pooling exceed its costs and detrimental impacts.

32. Carriers should only donate uncontaminated and lightly contaminated (up to 10% of the numbers assigned) to the thousands-block pools.

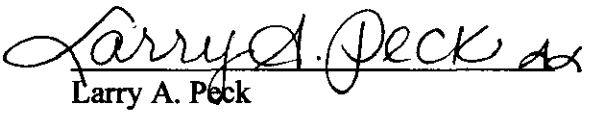
33. The NANPA should administer the thousands-block pools.

34. The costs of pooling should be categorized and recovered on the same basis as LNP.

35. The Commission should reject carrier-choice as a numbering optimization strategy.

36. The Commission should reject carrier-pays as a numbering optimization measure.

Respectfully submitted,



Larry A. Peck
Counsel for Ameritech
Room 4H86
2000 West Ameritech Center Drive
Hoffman Estates, IL 60196-1025
(847) 248-6074

Dated: July 30, 1999